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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/521,696

01/19/2005

Harumi Ogawa

SC-IAT-105

3717

69296 7590 06/25/2007
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EXAMINER

SAID, MANSOUR M

ART UNIT

PAPER NUMBER

2629

MAIL DATE

DELIVERY MODE

06/25/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/521,696	Applicant(s) OGAWA, HARUMI	
	Examiner MANSOUR M. SAID	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-10, 14 and 15 is/are rejected.
- 7) ☒ Claim(s) 11-13 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>1/19/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION***Drawings***

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “back face light-emitting diode” and “photo-electromotive force” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 8-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As to claims 8-10, 14 and 15, the claimed limitations “a light-receiving means for outputting a signal based on photo-electromotive force” is not clear, if the force only applied to light-receiving, and in addition, does the force applied to all light-emitting (led colors) at the same time. Explanation is needed.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 8-10 and 14-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Yajima Hiroshi (JP-08-097969; hereinafter referred to as Yajima).

As to claims 8-10 and 14-15, as best understood, Yajima teaches a residual image display device (figure 1) comprising: a substantially bar-shaped housing (figures, 3 and 7); a plurality of light-emitting diodes (led, (figures 3 & 7, (2-3))) arranged along a longitudinal direction of said housing (figures 3 and 7); a light-emitting means for making each of said

plurality of light-emitting diodes emit light individually (figures 3 & 7, page 6, paragraphs 0013 & 0015 and page 7, paragraph 0018); a light-receiving means for outputting a signal based on photoelectromotive force (photo detector) each of said plurality of light-emitting diodes (figures 1-3 & 7, page 6, paragraphs 0013 & 0015, page 7, paragraph 0018 and page 9, paragraph 0023); a scanning control means for controlling said light-emitting means to make each of said light-emitting diodes emit light which is positioned neighboring said each of light-emitting diodes that said light-receiving means outputs said signal based on the photoelectromotive force(photo detector) of (figures 1-3, 7 & 9, page 7, paragraph 0018, page 9, paragraph 0023 and page 12, paragraph 0031), and for controlling said light-receiving means to output said signal in the light-emitting state (figures 1-3, 7 & 9, page 7, paragraph 0018, and page 9, paragraph 0023; a generating means for generating two-dimensional residual image data of part of light-emitting diodes among said plurality of light-emitting diodes (figures 1-3 & 7, page 6, paragraph 0015, page 8, paragraph 0021, and page 11, paragraph 0030), based on the signals which are outputted from said light-receiving means and which are based on the photoelectromotive force (photo detector) of said plurality of light-emitting diodes (figures 1-3 & 7, page 6, paragraph 0015, page 8, paragraph 0021, and page 11, paragraph 0030); a storing means for storing said two-dimensional residual image data (figures 1-3, 7 & 9, page 6, paragraph 0015, page 8, paragraph 0021, and page 11, paragraph 0030) ; and a light-emission control means for controlling said light-emitting means to make said part of light-emitting diodes among said plurality of light-emitting diodes emit light based on said two-dimensional residual image data stored in said storing means, in accordance with swinging of said housing (figures 1-3, 7, & 9, page 6,

paragraphs 0013, 0015, page 7, paragraph 0018, page 8, paragraph 0021, page 11, paragraph 0030 and page 12, paragraph 12).

Allowable Subject Matter

6. **Claims 11-13 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.**

7. The following is a statement of reasons for the indication of allowable subject matter:

As to **claims 11-13**, “a detecting means for detecting a change of a swing direction of said housing, wherein, with using a timing when said detecting means detects the change of the swing direction as a standard timing, after only a period from a finishing timing of last light-emission of said light-emitting diodes by said two-dimensional residual image data to said timing when said detecting means detects the change of the swing direction is passed, said light-emission control means starts light-emission of said light emitting diodes by said two-dimensional residual image data”.

As to **claim 16**, “wherein said scanning control means controlling, instead of to make each of said light-emitting diodes emit light which is positioned neighboring said each of said light-emitting diodes to perform scanning, to make each of said different color light-emitting diodes emit light which is positioned neighboring said each of said light-emitting diodes to perform scanning, and for controlling to make said each of light-emitting diodes receive reflected light of said light”.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tokimoto et al. (5,406,300) teach a swing type aerial displays system.

Tokimoto et al. (5,670,971) teach a scan type display device with image scanning function.

Molinaroli (6,265,984 B1) teaches a light emitting diode display device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mansour M. Said whose telephone number is 571-272-7679. The examiner can normally be reached on Monday through Thursday from 8:30-6:00 P.M. The examiner can also be reached on alternate Friday from 8:30 a.m. to 5:00 p.m. EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard A. Hjerpe whose telephone number is 571-272-7681.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: 571-273-8300 (for Technology Center 2600 only)

Hand-delivered responses should be brought to the Customer Service Window at the Randolph Building, 401, Dulany Street, Alexandria, VA 22314.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mansour M. Said

6/19/07



RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600